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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,970	12/27/2000	Ralph M. Martin	RM393a	5888
23996	7590	11/18/2003	EXAMINER	
RICK MARTIN PATENT LAW OFFICES OF RICK MARTIN, PC 416 COFFMAN STREET LONGMONT, CO 80501			VANAMAN, FRANK BENNETT	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/748,970

Applicant(s)

MARTIN, RALPH M.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5,9-11,14-17 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-5,9-11,16,17 and 26-29 is/are rejected.
- 7) ☐ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **Status of Application**

1. Applicant's amendment, filed August 29, 2003, has been entered in the application. Claims 1-5, 9-11, 14-17, and 26-29 are pending.

### **Claim Rejections - 35 USC § 103**

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp (DE 2,402,684, cited previously) in view of Sittmann (DE 2,406,015, cited previously). Camp teaches a binding device for a ski (14) which is initially provided with safety-releasing, automatic front and rear jaws (see translation, page 5, lines 1-11) and which further includes a release mechanism including a track comprising a flat rigid member (34, 28, 16) which slides within a retaining device (32) having forward and rearward tab-shaped anchors for connection to the ski (see figures 2, 4; portion 34 of the track being located between the front and rear tab-shaped anchors of 32), the track receiving a ski binding member (12, 16), a remote transmitter (22) located within a ski pole (figure 5) and including both a main and safety switch (112, 96) wherein both switches must be engaged in order to operate the transmitter, a receiver (24) mountable on the ski and having an actuator (62) connected through a linkage to the track, the remote activation of the transmitter causing activation of the receiver to cause a movement of the track and lengthening of the distance between the heel and toe binding pieces. The reference of Camp fails to teach the actuator as including a gas chamber which includes a piston, the piston being biased by a spring to maintain a mounting distance and biased by a gas source to a release position. Sittmann teaches a fluid operated binding release mechanism (taught to be interchangeable with electric-operated systems-- see abstract lines 7-10), including a piston (371, 371a, b, c, etc.) which is biased by a spring (319) to a boot retaining position (end of 371 engaged with 314, 316) and which may be biased by a fluid (supplied through 375, 326a) to a release position. It would have been obvious to one of ordinary skill at the time of the invention to use a fluid powered release mechanism as taught by Sittmann to bias the track of

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Camp between mounting and release positions, wherein the application of a pressurized fluid is used to release the boot, for the purpose of allowing the boot release to be achieved with the use of less electric energy (thus conserving battery life, for example) than would be required by an all-electric release mechanism.

While the reference to Sittmann teaches a pressurized hydraulic fluid, rather than a pressurized gas, the use of a compressible gas is not deemed to be beyond the skill of the ordinary practitioner in view of Sittmann's already teaching the use of a hydraulic medium to actuate the release mechanism, and as such, it would have been obvious to one of ordinary skill in the art at the time of the invention to use gas instead of hydraulic fluid for the purpose of using a medium which would be easily obtained and replaced by a consumer. The reference to Sittmann fails to specifically teach the provision of a braking device which moves downwardly to engage a snow surface when the boot is not in the ski. Such braking devices are very old and well known in the ski and even snowboard arts, and as such, the provision of such a brake, responsive to the removal of the boot from the binding, would not be beyond the skill of the ordinary practitioner, for the very well known purpose of preventing the ski from continuing to move down a slope should its user become separated from it.

4. Claims 2-5, 9-11, 21, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp in view of Sittmann and Spitaler (US 4,545,598, cited previously). The references of Camp and Sittmann are discussed above, and fail to teach the operation of the release mechanism as being characterized by a pressurized gas to maintain a mounting position, wherein the pressure is released by a plug, allowing a spring to bias the piston to a release position. Spitaler teaches a pressurized fluid binding mechanism wherein a spring-biased piston (6) and actuator (6B) is biased by a pressurized fluid in a retaining position, and wherein a plug (9A) is released to allow the release of the pressure (against working face 21) on the piston, the spring then urging the piston to a boot-release condition (see figure 1). It would have been obvious to one of ordinary skill at the time of the invention to reverse the operation of the piston and spring taught by the combined references of Camp and Sittmann,

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wherein the release of pressure in the fluid causes release of the boot, in order to insure that the boot can be released even if a further supply of pressurized fluid is unavailable.

As regards claim 11, while the references of Camp, Sittmann and Spitaler fail to specifically teach the heel piece, toe piece, track and actuator on a mounting plate with an aperture for attachment to a ski, the provision of a mounting plate with screw holes which carries an entire binding system is very old and well known, and as such, it would have been obvious to one of ordinary skill at the time of the invention to mount all binding elements on a single plate for the purpose of easily and quickly attaching and detaching the mechanism to and from the ski.

5. Claims 16, 17, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camp in view of Sittmann, Spitaler and Wunder (US 3,528,672, cited previously). The references of Camp, Sittmann and Spitaler are discussed above, and fail to teach the use of a compressed gas cylinder in the form of a CO<sub>2</sub> cartridge. Wunder teaches the use of a compressed gas system for providing motive power to a ski boot release mechanism (e.g., figures 1 and 2) and further teaches that a compressed gas reservoir may be used (col. 4, lines 67-72) in place of a user operated pump or cushion. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a reservoir with a compressed gas as a source of motive fluid as taught by Wunder, for the purpose of allowing an easily obtained and replaced source to be used by the consumer. While Wunder fails to specifically teach a CO<sub>2</sub> cartridge and puncture mechanism. The examiner hereby takes Official Notice that CO<sub>2</sub> cartridges and accompanying puncture mechanisms are extremely old and well known in the field of providing small scale compressed gas systems with power, and as such, in view of Wunder teaching the use of a separate gas reservoir, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a commonly available and well known CO<sub>2</sub> cylinder source and puncture device in order to facilitate manufacture of the device, and to reduce construction costs by employing a commonly available mechanism.

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### **Allowable Subject Matter**

6. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Response to Comments**

7. Applicant's comments have been carefully considered. As regards the concept of both an automatic and human controlled release scheme, the examiner notes that the reference to Camp does indeed teach such a scheme, as evidenced by a perusal of the translation (cited by applicant) of Camp, at page 5, lines 1-11, wherein Camp describes the mechanism as carrying toe and heel engagement element which may automatically release independently of the human controlled release scheme which Camp additionally teaches. As regards the provision of a ski brake which engages the ski surface, the examiner reiterates that this is a very old and well known feature provided on skis to prevent them from being lost (e.g., by continuing down a slope after the user has been disconnected from them), and that it is not beyond the skill of the ordinary practitioner to provide such a device for the old and well known reason of preventing such a loss.

### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sandorf (US 4,376,545), Goud (US 5,004,065), Sedlmair et al. (US 5,158,317), and Couderc et al. (US 5,730,457) all teach that the provision of a ski brake which extends downwardly when a boot is removed from the ski, lacking any further structural distinction, is an old and well established feature in the prior art.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

As of May 1, 2003, any response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326  
After Final Amendments: 703-872-9327  
Customer Service Communications: 703-872-9325

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**



Handwritten signature of F. Vanaman, dated 11/16/03.